

great handfulls of the flowers. I think they must have opened about a week ago, as the racemes had set fruit below. There were many budding clusters also. I account for this display by the fact that the swamp in question was reduced to dusty dryness by the long-continued drouth; this acted on the plants much as their normal winter rest. When followed by rain—flooding the marsh—and then by an extended period of warm weather, they burst forth into flower. A natural consequence, I should suppose, would be a dearth of my favorites next spring.—W. WHITMAN BAILEY, *Brown University*.

Tubers.—That the scales on the tubers represent leaves of the of aerial stems is well known. The study of the phyllotaxy of these subterranean leaves is quite as interesting as that of ordinary leaves. In examining all tubers of cultivated and wild plants that I can obtain, I find that a plant has the same arrangement of foliar organs on tubers that it has on the stem; and where two plans exist, the one at the base of the stem is the one followed by the tuber. Good examples are found in the potato, in which both leaves and scales are alternate; and in *Helianthus doricoides*, L., and tuberous, L., where the leaves are opposite below and more or less alternate above, the scales on the tubers are opposite. In the latter species scales frequently subtend “knobs”, the tuber branches, which are then opposite and themselves bear scales—the leaves of the branch. The dimerous whorls decussate on tubers as well as do those of the stem. Another interesting fact is the completion of growth as to length in the lower internodes of the tuber while the upper are still quite small—a characteristic of the stem.—AUG. F. FÖERSTE, *Dayton, Ohio*.

Notes.—Teachers of botany may be interested in knowing, if they do not know already, that the now common Japanese *Ampelopsis* presents an excellent instance of a uni-foliolate compound leaf. The three-lobed, or sometimes barely lobed and dentate leaflet has all the appearance of a simple leaf, but falls off by a distinct articulation from the top of the extremely long petiole, which is apt to persist sometime thereafter.

In the analysis of *Heterocentron roseum*, of the order *Melastomaceae*, students complain that they can not ascertain the name by the key in the School and Field-book of Botany. I find that the difficulty is in the statement that in that family the calyx is coherent with the ovary. In *Heterocentron*, so far as I have examined specimens, it is distinctly *free*. The ordinal characteristics given by LeMaout and Decaisne, give the alternative of free or coherent.—W. W. BAILEY, *Brown University*.